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FILE COVERS 1907 - 16 Aug 2002 VOL 137 ISS 8 FILE LAST UPDATED: 15 Aug 2002 (20020815/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

CAS roles have been modified effective December 16, 2001. Please check your SDI profiles to see if they need to be revised. For information on CAS roles, enter HELP ROLES at an arrow prompt or use the CAS Roles thesaurus (/RL field) in this file.

```
=> d stat que
           241 SEA FILE=REGISTRY ABB=ON PLU=ON STABILIZ?
L2
           216 SEA FILE=REGISTRY ABB=ON PLU=ON COLLAGENASE
L3
           213 SEA FILE=REGISTRY ABB=ON PLU=ON GELATIN
L4
           1906 SEA FILE=REGISTRY ABB=ON PLU=ON COLLAGEN
L5
              4 SEA FILE=HCAPLUS ABB=ON PLU=ON ?ANTIGENIC (W) (STABILIZER OR
L6
         17983 SEA FILE=HCAPLUS ABB=ON PLU=ON L3 OR COLLAGENASE
L8
         202166 SEA FILE=HCAPLUS ABB=ON PLU=ON L4 OR GELATIN OR L5 OR
L9
               COLLAGEN
          12988 SEA FILE=HCAPLUS ABB=ON PLU=ON L8 (L) L9
L10
              4 SEA FILE=HCAPLUS ABB=ON PLU=ON L10 AND L6
L11
```

=> d ibib abs hitrn 111 tot

L11 ANSWER 1 OF 4 HCAPLUS COPYRIGHT 2002 ACS ACCESSION NUMBER: 2002:276512 HCAPLUS

DOCUMENT NUMBER:

136:293615

TITLE:

Nonantigenic stabilizer and physiologically active substance

INVENTOR(S):

Sakai, Yasuo; Kutsuzawa, Rumiko; Onuma, Masamichi

PATENT ASSIGNEE(S): Japan

SOURCE:

U.S. Pat. Appl. Publ., 7 pp., Cont.-in-part of U.S.

Ser. No. 780,086, abandoned.

CODEN: USXXCO

DOCUMENT TYPE:

Patent English

LANGUAGE:

FAMILY ACC. NUM. COUNT: 3

PATENT INFORMATION:

PATENT NO. KIND DATE

APPLICATION NO. DATE

```
_____
                                            US 2001-849395
                                                             20010507
                            20020411
     US 2002042363
                       A 1
                                                             19951227
                       A2
                            19970708
                                            JP 1995-352918
     JP 09176196
                                                         A 19951227
PRIORITY APPLN. INFO.:
                                         JP 1995-352918
                                                          B2 19961223
                                         US 1996-780086
     The invention provides a nonantigenic stabilizer that
     can be obtained with a high yield, inducing no anaphylaxis, and has an
     effect of stabilizing a physiol. active substance, and provides a physiol.
     active substance stabilized thereby. The nonantigenic
     stabilizer contains .gtoreq.70% of peptides that have mol. wts.
     .ltoreq.20,000 and an amino acid sequence (Gly-X-Y)n which can be obtained
     by specifically decompg. gelatin or collagen using a
     collagenase. The physiol. active substance contains 0.005-15% by
     wt. of the nonantigenic stabilizer.
     9001-12-1, Collagenase
ΙT
     RL: CAT (Catalyst use); USES (Uses)
        (nonantigenic stabilizer and physiol. active
        substance)
L11 ANSWER 2 OF 4 HCAPLUS COPYRIGHT 2002 ACS
                         2002:51975 HCAPLUS
ACCESSION NUMBER:
                         136:107469
DOCUMENT NUMBER:
                         Nonantigenic stabilizer containing
TITLE:
                         peptides
                         Sakai, Yasuo; Kutsuzawa, Rumiko; Onuma, Masamichi
INVENTOR(S):
PATENT ASSIGNEE(S):
                         Japan
                         U.S. Pat. Appl. Publ., 8 pp., Cont.-in-part of U.S.
SOURCE:
                         Ser. No. 942,898, abandoned.
                         CODEN: USXXCO
DOCUMENT TYPE:
                         Patent
                         English
LANGUAGE:
FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:
                                            APPLICATION NO.
                                                             DATE
     PATENT NO.
                      KIND
                            DATE
                            _____
                                            US 2000-490641
                                                             20000124
     US 2002006894
                       Α1
                             20020117
                                            JP 1995-352918
                                                             19951227
                            19970708
     JP 09176196
                       A2
                                         JP 1995-352918 A 19951227
PRIORITY APPLN. INFO.:
                                                          B3 19961223
                                         US 1996-780086
                                         US 1997-942898
                                                          B2 19971002
     The invention provides a nonantigenic stabilizer that
AΒ
     can be obtained with a high yield, inducing no anaphylaxis, and has an
     effect of stabilizing a physiol. active substance, and provides a physiol.
     active substance stabilized thereby. The nonantigenic stabilizer contains not less than 70% of peptides which can be
     obtained by specifically decompg. gelatin or collagen
     using a collagenase that have a mol. wt. not more than 20,000
     and an amino acid sequence (Gly-x-Y)n. The physiol. active substance
     contains 0.005-15 percent by wt. of the nonantigenic
     stabilizer.
     9001-12-1, Collagenase
IT
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (nonantigenic stabilizer contg. peptides)
L11 ANSWER 3 OF 4 HCAPLUS COPYRIGHT 2002 ACS
```

DOCUMENT NUMBER: 128:164710

TITLE: Method for removing antigenic component from composition containing non-antigenic peptide,

1998:65483 HCAPLUS

ACCESSION NUMBER:

nonantigenic stabilizer or

physiological active material

PATENT ASSIGNEE(S):

Onuma, Masamichi; Sakai, Yasuo Miyagi Chemical Industrial Co., Ltd., Japan

SOURCE:

Jpn. Kokai Tokkyo Koho, 8 pp.

CODEN: JKXXAF

DOCUMENT TYPE:

INVENTOR(S):

Patent

LANGUAGE:

Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 10017596	A2	19980120	JP 1996-193958	19960703
TD 3107923	R2	20010813		

Method comprising reverse phase chromatog. and hydrophobic chromatog. is AΒ used for removing antigen or allergen from peptide prepn., nonantigenic stabilizer or physiol. active substance. The peptide compn. useful for therapeutic uses is derived from collagen and/or gelatin digested with 1 or 2 types of proteases, or treated with acid and heat.

9001-12-1, Collagenase IT

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES

(reverse phase chromatog. and hydrophobic chromatog. is used for removing antigen or allergen from peptide prepn., nonantigenic stabilizer or physiol. active substance)

L11 ANSWER 4 OF 4 HCAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER:

1997:552622 HCAPLUS

DOCUMENT NUMBER:

127:152948

TITLE:

Nonantigenic stabilizer and physiologically active substance

INVENTOR(S):

Sakai, Yasuo; Kutsuzawa, Rumiko; Onuma, Masamichi

APPLICATION NO.

DATE

Miyagi Kagaku Kogyo Kabushiki Kaisha, Japan PATENT ASSIGNEE(S):

SOURCE:

Eur. Pat. Appl., 10 pp. CODEN: EPXXDW

DOCUMENT TYPE:

Patent

KIND DATE

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.

EP 781779 A2	19970702	EP 1996-120888	19961227
EP 781779 A3	19990407		•
R: BE, CH, DE, FR	, GB, LI		
JP 09176196 A2	19970708	JP 1995-352918	19951227
PRIORITY APPLN. INFO.:		1995-352918 A	
AB The invention provides	a nonantigenic	<b>stabilizer</b> that	
can be obtained with a	high yield, in	cluding no anaphy	laxis, and has an
effect of stabilizing	a physiol. acti	ve substance, and	provides a physiol.
active substance stabi	lized thereby.	The nonantigenic	
stabilizer contains .g	torea.70% of pe	ptides which can	be obtained
by specifically decomp	g gelatin or c	ollagen using a	
collagenase that have	a mol wt not	more than 20,000	and an amino
collagenase that have	a mor. wc. not	l activo substan	ce contains
acid sequence (Gly-x-Y	in. The physic	i. active substan	ce contains
0.005-15% nonantigenic	stabilizer. T	nus, the	TITL in amounted by
stability of a freeze-	dried urokinase	prepn. (160,000	10) was increased by
the addn. of a peptide	(mol. wt. $<20$ ,	000).	

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CAS roles have been modified effective December 16, 2001. Please check your SDI profiles to see if they need to be revised. For information on CAS roles, enter HELP ROLES at an arrow prompt or use the CAS Roles thesaurus (/RL field) in this file.

=> d	stat que li	15				
L1	2458	SEA	FILE=REGISTRY	ABB=ON	PLU=ON	GXX/SQSP NOT (GGG GXG GGX)/SQ
		SP				
L2	241	SEA	FILE=REGISTRY	ABB=ON	PLU=ON	STABILIZ?
L3	216	SEA	FILE=REGISTRY	ABB=ON	PLU=ON	COLLAGENASE
L4	213	SEA	FILE=REGISTRY	ABB=ON	PLU=ON	GELATIN
L5	1906	SEA	FILE=REGISTRY	ABB=ON	PLU=ON	COLLAGEN
L6	4	SEA	FILE=HCAPLUS	ABB=ON	PLU=ON	?ANTIGENIC (W) (STABILIZER OR
		L2)				
L8	17983	SEA	FILE=HCAPLUS	ABB=ON	PLU=ON	L3 OR COLLAGENASE
L9	202166	SEA	FILE=HCAPLUS	ABB=ON	PLU=ON	L4 OR GELATIN OR L5 OR
		COLI	LAGEN			
L10	12988	SEA	FILE=HCAPLUS	ABB=ON	PLU=ON	L8 (L) L9
L11	4	SEA	FILE=HCAPLUS	ABB=ON	PLU=ON	L10 AND L6
L12	392512	SEA	FILE=HCAPLUS	ABB=ON	PLU=ON	STABILIZ? OR L2
L13	1138	SEA	FILE=HCAPLUS	ABB=ON	PLU=ON	L1
L14	21	SEA	FILE=HCAPLUS	ABB=ON	PLU=ON	L13 AND L12
L15	21	SEA	FILE=HCAPLUS	ABB=ON	PLU=ON	L14 NOT L11

## => d ibib abs hitrn 115 tot

L15 ANSWER 1 OF 21 HCAPLUS COPYRIGHT 2002 ACS ACCESSION NUMBER: 2002:256059 HCAPLUS

DOCUMENT NUMBER: 136:299707

TITLE: Stable peptide formulations

INVENTOR(S): Marra, Michelle T.; Anderson, Bradley D.; McCabe, R.

Tyler

PATENT ASSIGNEE(S): Cognetix, Inc., USA; University of Utah Research

Foundation

SOURCE: PCT Int. Appl., 56 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

LANGUAGE:

Patent English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

```
PATENT NO.
                    KIND DATE
                                         APPLICATION NO. DATE
     _____ ____
                          _____
                                         -----
                           20020404
                    A1
                                        WO 2001-US30457 20010928
    WO 2002026248
        W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
            CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
            GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
            LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL,
            PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG,
            UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
        RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
            DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,
            BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
PRIORITY APPLN. INFO.:
                                      US 2000-672712
                                                       A 20000929
    The present invention is directed to formulations suitable for
    stabilizing linear peptides such as conantokins. The formulations
    of the present invention have improved stability for longer shelf life and
    delivery life.
```

406874-24-6 TT

RL: PRP (Properties)

(unclaimed protein sequence; stable peptide formulations)

REFERENCE COUNT:

2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 2 OF 21 HCAPLUS COPYRIGHT 2002 ACS ACCESSION NUMBER: 2001:811957 HCAPLUS

DOCUMENT NUMBER:

136:128579

TITLE:

Amphipathic .alpha. helical antimicrobial peptides. A

systematic study of the effects of structural and

physical properties on biological activity

AUTHOR(S):

Giangaspero, Anna; Sandri, Luca; Tossi, Alessandro

Department of Biochemistry, Biophysics and CORPORATE SOURCE:

Macromolecular Chemistry, University of Trieste,

Trieste, I-34127, Italy

SOURCE:

European Journal of Biochemistry (2001), 268(21),

5589-5600

CODEN: EJBCAI; ISSN: 0014-2956

Blackwell Science Ltd.

DOCUMENT TYPE:

Journal

PUBLISHER:

English

LANGUAGE: Antimicrobial peptides (AMPs) that assume an amphipathic .alpha. helical structure are widespread in nature. Their activity depends on several parameters including the sequence, size, degree of structure formation, cationicity, hydrophobicity and amphipathicity. The anal. of numerous natural AMPs provided representative values for these parameters and led to a sequence template with which to generate potent artificial lead AMPs. Sequences were then varied in a rational manner, using both natural and nonproteinogenic amino acids, to probe the individual roles of each parameter in modulating biol. activity. A high cationicity combined with a stabilized amphipathic .alpha. helical structure conferred enhanced cidal activity towards all the cell types considered, and was a requirement for Gram-pos. bacteria and fungi. An elevated helicity also correlated with increased hemolytic activity. The structural requirements for activity against several Gram-neg. bacteria were instead considerably less stringent, so that it persisted in peptides in which formation of a

helical structure and/or amphipathicity were impeded. Either a reduced charge or a reduced hydrophobicity resulted in generally inactive peptides. These observations, combined with the kinetics of bacterial membrane permeabilization and time-killing are discussed in terms of currently accepted models of action for this type of peptide. The simple guidelines obtained in this study allowed the design of highly active shortened AMPs and may be generally useful in the development of this type of peptides as anti-infective agents.

393165-70-3P 393165-71-4P 393165-72-5P
393165-73-6P 393165-74-7P 393165-75-8P

IT 393165-70-3P 393165-71-4P 393165-72-5P 393165-73-6P 393165-74-7P 393165-75-8P 393165-76-9P 393165-77-0P 393165-78-1P 393165-79-2P 393165-80-5P 393165-81-6P 393165-85-0P 393165-86-1P 393165-87-2P 393165-88-3P 393165-89-4P

RL: PAC (Pharmacological activity); PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(amphipathic .alpha. helical antimicrobial peptides. a systematic study of effects of structural and phys. properties on biol. activity)

REFERENCE COUNT: 54 THERE ARE 54 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 3 OF 21 HCAPLUS COPYRIGHT 2002 ACS ACCESSION NUMBER: 2001:763025 HCAPLUS

DOCUMENT NUMBER: 135:335111

TITLE: Albumin fusion proteins with therapeutic proteins for

improved shelf-life

INVENTOR(S): Rosen, Craig A.; Haseltine, William A. PATENT ASSIGNEE(S): Human Genome Sciences, Inc., USA

SOURCE: PCT Int. Appl., 2102 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 7

PATENT INFORMATION:

```
APPLICATION NO. DATE
        PATENT NO.
                              KIND DATE
        ______
                                    ____
                                              _____
                                                                       _____
                                  A1 20011018 WO 2001-US11988 20010412
        WO 2001077137
              W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO,
                     RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
              RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
                                                                   US 2000-229358P P 20000412
PRIORITY APPLN. INFO.:
                                                                   US 2000-199384P P 20000425
                                                                   US 2000-256931P P 20001221
```

AB The present invention encompasses fusion proteins of albumin with various therapeutic proteins. Therapeutic proteins may be **stabilized** to extend the shelf-life, and/or to retain the therapeutic protein's activity for extended periods of time in soln., in vitro and/or in vivo, by genetically or chem. fusing or conjugating the therapeutic protein to albumin or a fragment or variant of albumin. Use of albumin fusion proteins may also reduce the need to formulate the protein solns. With large excesses of carrier proteins to prevent loss of therapeutic proteins

due to factors such as binding to the container. Nucleic acid mols. encoding the albumin fusion proteins of the invention are also encompassed by the invention, as are vectors contg. these nucleic acids, host cells transformed with these nucleic acids vectors, and methods of making the albumin fusion proteins of the invention and using these nucleic acids, vectors, and/or host cells. Thus, plasmid vectors are constructed in which DNA encoding the desired therapeutic protein may be inserted for expression of the albumin fusion proteins in yeast (pPPC0005) and mammalian cells (pC4:HSA). Yeast-derived signal sequences from Saccharomyces cerevisiae invertase SUC2 gene, or the stanniocalcin or native human serum albumin signal peptides, are used for secretion in yeast or mammalian systems, resp. Thus, the fusion product of human growth hormone with residues 1-387 of human serum albumin retains essentially intact biol. activity after 5 wk of incubation in tissue culture media at 37.degree., whereas recombinant human growth hormone used as control lost its biol. activity in the first week. Although the potency of the albumin fusion proteins is slightly lower than the unfused counterparts in rapid bioassays, their biol. stability results in much higher biol. activity in the longer term in vitro assay or in vivo assays. Addnl., the present invention encompasses pharmaceutical compns. comprising albumin fusion proteins and methods of treating, preventing, or ameliorating diseases, disorders or conditions using albumin fusion proteins of the invention.

IT 337986-92-2 339140-58-8 339216-54-5 339216-67-0 339602-93-6 368943-00-4

368943-06-0 369638-85-7

RL: PRP (Properties)

(unclaimed protein sequence; albumin fusion proteins with therapeutic proteins for improved shelf-life)

REFERENCE COUNT:

THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 4 OF 21 HCAPLUS COPYRIGHT 2002 ACS ACCESSION NUMBER: 2001:636448 HCAPLUS

3

DOCUMENT NUMBER:

105.050144

TITLE:

135:358144
Toward New Designed Proteins Derived from Bovine

Pancreatic Trypsin Inhibitor (BPTI): Covalent

Cross-Linking of Two 'Core Modules' by Oxime-Forming

Ligation

AUTHOR(S):

Carulla, Natalia; Woodward, Clare; Barany, George Department of Chemistry, University of Minnesota,

Minneapolis, MN, 55455, USA

CORPORATE SOURCE:

Bioconjugate Chemistry (2001), 12(5), 726-741

CODEN: BCCHES; ISSN: 1043-1802

PUBLISHER:

SOURCE:

American Chemical Society

DOCUMENT TYPE: LANGUAGE:

Journal English

AB A 25-residue disulfide-crosslinked peptide, termed 'oxidized core module' (OxCM), that includes essentially all of the secondary structural elements of bovine pancreatic trypsin inhibitor (BPTI) most refractory to hydrogen exchange, was shown previously to favor native-like .beta.-sheet structure [Carulla et al., Biochem. 39 (2000), 7927-7937]. The present work preps. to explore the hypothesis that the energies of native-like conformations, relative to other possible conformations, could be decreased further by covalent linkage of two OxCMs. Optimized syntheses of six .apprx.50-residue OxCM dimers are reported herein, featuring appropriate monomer modifications followed by oxime-forming ligation chem. to create covalent crosslinks at various positions and with differing lengths. Several side reactions were recognized through this work, and modified procedures to lessen or mitigate their occurrence were developed.

Particularly noteworthy, guanidine or urea denaturants that were included as peptide-solubilizing components for some reaction mixts. were proven to form adducts with glyoxyl moieties, thus affecting rates and outcomes. is recommended that urea should not be used at all, and quanidine hydrochloride should be used only at lowest possible concn. consistent with peptide soly. All six synthetic OxCM dimers were characterized by 1D 1H NMR; three of them showed considerable chem. shift dispersion suggestive of self-assocn. and mutual stabilization between the monomer units.

### ΙT 372486-66-3P

RL: SPN (Synthetic preparation); PREP (Preparation)

(prepn. of BPTI "oxidized core module" dimers that are

disulfide-crosslinked peptides dimerized via oxime-forming ligations)

# IT

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(prepn. of BPTI-based, disulfide-crosslinked peptide monomers contg. a glyoxyl moiety on the side chain)

#### IT 372164-35-7P

RL: SPN (Synthetic preparation); PREP (Preparation)

(prepn. of BPTI-based, disulfide-crosslinked peptide monomers with a

"capped" glyoxyl group on side chain)

THERE ARE 34 CITED REFERENCES AVAILABLE FOR THIS REFERENCE COUNT: 34 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 5 OF 21 HCAPLUS COPYRIGHT 2002 ACS 2001:98372 HCAPLUS ACCESSION NUMBER:

134:232542 DOCUMENT NUMBER:

Genome sequence of enterohemorrhagic Escherichia coli TITLE:

O157:H7

Perna, Nicole T.; Plunkett, Guy, III; Burland, AUTHOR(S):

Valerie; Mau, Bob; Glasner, Jeremy D.; Rose, Debra J.; Mayhew, George F.; Evans, Peter S.; Gregor, Jason; Kirkpatrick, Heather A.; Posfai, Gyorgy; Hackett, Jeremiah; Klink, Sara; Boutin, Adam; Shao, Ying; Miller, Leslie; Grotbeck, Erik J.; Davis, N. Wayne;

Lim, Alex; Dimalanta, Eileen T.; Potamousis, Konstantinos D.; Apodaca, Jennifer; Anantharaman, Thomas S.; Lin, Jieyi; Yen, Glaex; Schwartz, David C.; Welch, Rodney A.; Blattner, Frederick R. Genome Center of Wisconsin, Department of Animal

CORPORATE SOURCE:

Health and Biomedical Sciences, Laboratory of Genetics, Department of Chemistry, Department of Biostatistics, and Department of Medical Microbiology and Immunology, University of Wisconsin, Madison, WI,

53706, USA

SOURCE: Nature (London) (2001), 409(6819), 529-533

CODEN: NATUAS; ISSN: 0028-0836

Nature Publishing Group PUBLISHER:

DOCUMENT TYPE: Journal LANGUAGE: English

The bacterium Escherichia coli O157:H7 is a worldwide threat to public health and has been implicated in many outbreaks of hemorrhagic colitis, some of which included fatalities caused by hemolytic uremic syndrome. Close to 75,000 cases of O157:H7 infection are now estd. to occur annually in the United States. The severity of disease, the lack of effective treatment and the potential for large-scale outbreaks from contaminated food supplies have propelled intensive research on the pathogenesis and detection of E. coli O157:H7. The genome of E. coli O157:H7 was sequenced to identify candidate genes responsible for pathogenesis, to develop

better methods of strain detection and to advance our understanding of the evolution of E. coli, through comparison with the genome of the non-pathogenic lab. strain E. coli K-12. Lateral gene transfer found to be far more extensive than previously anticipated. In fact, 1387 new genes encoded in strain-specific clusters of diverse sizes were found in O157:H7. These include candidate virulence factors, alternative metabolic capacities, several prophages, and other new functions - all of which could be targets for surveillance.

IT 326034-41-7 326034-70-2 326036-95-7 326037-61-0

RL: BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study)

(amino acid sequence; genome sequence of enterohemorrhagic Escherichia coli O157, H7)

REFERENCE COUNT: 30 THERE ARE 30 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 6 OF 21 HCAPLUS COPYRIGHT 2002 ACS ACCESSION NUMBER: 2000:553593 HCAPLUS

DOCUMENT NUMBER: 133:176161

TITLE: Novel polypeptides involved in immune response

INVENTOR(S): Yoshinaga, Steven Kiyoshi

PATENT ASSIGNEE(S): Amgen Inc., USA

SOURCE: PCT Int. Appl., 174 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

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PATENT NO.
                                         DATE
                                                                 APPLICATION NO.
                                 KIND
                                                                                           DATE
                                 ____
       WO 2000046240
                                  A2
                                          20000810
                                                                 WO 2000-US1871
                                                                                           20000127
       WO 2000046240
                                  Α3
                                          20001221
                  AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU,
                   CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM,
                   AZ, BY, KG, KZ, MD, RU, TJ, TM
             RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
                                          20011031
                                                                 EP 2000-907027
                                                                                           20000127
       EP 1149114
                                  A2
             R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
                   IE, SI, LT, LV, FI, RO
                                                             US 1999-244448
PRIORITY APPLN. INFO.:
                                                                                       A2 19990203
                                                             US 1999-264527
                                                                                      A2 19990308
                                                             WO 2000-US1871
                                                                                      W 20000127
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AB Novel polypeptides which comprise a receptor-ligand pair involved in T-cell activation are disclosed. The polypeptides are CD28-related protein 1 or CRP1 and B7-related protein 1 or B7RP1. Nucleic acid mols. encoding said polypeptides, and vectors and host cells for expressing same are also disclosed. The polypeptides, or agonists and antagonists thereof, are used to treat T-cell mediated disorders.

IT 288165-97-9 288165-99-1 288166-00-7

RL: PRP (Properties)

(unclaimed protein sequence; novel polypeptides involved in immune response)

L15 ANSWER 7 OF 21 HCAPLUS COPYRIGHT 2002 ACS ACCESSION NUMBER: 1999:352046 HCAPLUS

DOCUMENT NUMBER: 131:116493

TITLE: Nonapeptide Analogues Containing (R)-3-

Hydroxybutanoate and .beta.-Homoalanine Oligomers: Synthesis and Binding Affinity to a Class I Major

Histocompatibility Complex Protein

AUTHOR(S): Poenaru, Sorana; Lamas, Jose R.; Folkers, Gerd; Lopez

de Castro, Jose A.; Seebach, Dieter; Rognan, Didier

CORPORATE SOURCE: Laboratory for Organic Chemistry, Swiss Federal

Institute of Technology, Zurich, CH-8092, Switz. Journal of Medicinal Chemistry (1999), 42(13),

2318-2331

CODEN: JMCMAR; ISSN: 0022-2623

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal LANGUAGE: English

SOURCE:

Crystal structures of antigenic peptides bound to class I MHC proteins suggest that chem. modifications of the central part of the bound peptide should not alter binding affinity to the MHC restriction protein but could perturb the T-cell response to the parent epitope. In the authors' effort in designing non-peptidic high-affinity ligands for class I MHC proteins, oligomers of (R)-3-hydroxybutanoate and(or) .beta.-homo-alanine have been substituted for the central part of a HLA-B27-restricted T-cell epitope of viral origin. The affinity of six modified peptides to the B\*2705 allele was detd. by an in vitro stabilization assay. Four out of the six designed analogs presented an affinity similar to that of the parent peptide. Two compds., sharing the same stereochem. (R,R,S,S) at the four stereogenic centers of the non-peptidic spacer, bound to B\*2705 with a 5-6-fold decreased affinity. Although the chiral spacers do not strongly interact with the protein active site, there are configurations which are not accepted by the MHC binding groove, probably because of improper orientation of some lateral substituents in the bound state and different conformational behavior in the free state. However the authors demonstrate that .beta.-amino acids can be incorporated in the sequence of viral T-cell epitopes without impairing MHC binding. The presented structure-activity relationships open the door to the rational design of peptide-based vaccines and of non-natural T-cell receptor antagonists aimed at blocking peptide-specific T-cell responses in MHC-assocd. autoimmune diseases.

# IT 233259-01-3P 233259-02-4P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(prepn. and reaction of in the synthesis of nonapeptide analogs contg.

(R)-3-hydroxybutanoate and .beta.-homo-alanine oligomers)

REFERENCE COUNT: 80 THERE ARE 80 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 8 OF 21 HCAPLUS COPYRIGHT 2002 ACS ACCESSION NUMBER: 1999:251930 HCAPLUS

DOCUMENT NUMBER: 131:37639

TITLE: Photoinduced electron transfer in supramolecular

fullerene / ferrocene systems

AUTHOR(S): Guldi, D. M.; Maggini, M.; Scorrano, G.; Prato, M.;

Bianco, A.; Toniolo, C.

CORPORATE SOURCE: Radiation Laboratory, University of Notre Dame, Notre

Dame, IN, 46556, USA

SOURCE: Journal of Information Recording (1998), 24(1-2),

33-39

CODEN: JIREFL; ISSN: 1025-6008

PUBLISHER: Gordon & Breach Science Publishers

DOCUMENT TYPE: Journal LANGUAGE: English

In this paper the authors summarized studies regarding the deactivation of photoexcited fullerenes via inter- and intramol. quenching reactions with ferrocene as electron donor. Intermol. reductive quenching of excited triplet fullerenes in heterogeneous media (.gamma.-cyclodextrin and surfactant solns.) gave rise to long-lived charge sepd. states. Intramol. processes were followed after irradn. of fullerene derivs. covalently linked to ferrocene through flexible spacers or rigid unsatd. bridges. Steady-state fluorescence and time-resolved flash photolysis of these fullerene-ferrocene based dyads have shown that, in all cases, electron transfer evolves from photoinduced bleaching of the fullerene excited singlet state by the ferrocenyl moiety. However, the nature of the spacer between C60 and ferrocene suggest two different quenching mechanisms: through bond electron transfer for rigid spaced dyad 2, formation of a transient intramol. excited state complex (exciplex) for flexible spaced dyad 1. While in dyad 2 fast charge recombination prevents enough stabilization, the satd. hydrocarbon bridge in dyad 1 stabilizes a long-lived charge-sepd. state in benzonitrile (.tau.1/2 = 2.5 .mu.s). Steady-state and time-resolved photolytic expts. on a ferrocene-peptide/-fulleropyrrolidine host-guest complex were carried out. In the proposed complex, in which the peptide adopts in CHCl3 soln. a helical conformation, the two ferrocene groups react mainly with the excited singlet state of the electron accepting fulleropyrrolidine guest. On the other hand, in a 1:1 CHCl3/hexafluoroisopropanol mixt. weaker interactions of the ferrocene with the fullerene core lead predominantly to quenching of the longer-lived excited triplet state. This suggests substantial changes of the ability of the ferrocene-peptide to complex the C60 deriv.

### ΙT 193417-39-9

RL: PEP (Physical, engineering or chemical process); PROC (Process) (photolysis study of ferrocene-peptide/-fulleropyrrolidine host-guest complex)

REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 9 OF 21 HCAPLUS COPYRIGHT 2002 ACS 1998:350390 HCAPLUS ACCESSION NUMBER:

DOCUMENT NUMBER:

129:95711

TITLE: Synthesis and stabilization of amino and

carboxy terminal constrained collagenous peptides

Tanaka, Yuji; Suzuki, Kazuo; Tanaka, Toshiki AUTHOR(S):

CORPORATE SOURCE: Institute for Fundamental Research of Organic

Chemistry, Kyushu University, Fukuoka, 812-81, Japan Journal of Peptide Research (1998), 51(6), 413-419 SOURCE:

CODEN: JPERFA; ISSN: 1397-002X

Munksgaard International Publishers Ltd. PUBLISHER:

DOCUMENT TYPE: Journal LANGUAGE: English

Short collagenous peptides cross-linked at their amino and carboxy termini AB with Lys-Lys-dimer template(s) were synthesized, and the effect of the crosslinking on their stabilities was investigated by thermal denaturation expts. Two chemoselective ligations were used for the construction of the amino and the carboxy cross-linked peptides. The thermal transition temp. (Tm) and the std. free energies (.DELTA.G.degree.) of the cross-linked collagenous peptides increased, and the thermal stabilization effect corresponded to an elongation by two units of the Gly-Pro-Hyp triad. The van't Hoff enthalpy (.DELTA.H.degree.) and the entropy (.DELTA.S.degree.) values of the cross-linked peptides increased with

chain elongation, although the increments were smaller than those of the linear peptides. When the same chain lengths were compared, the .DELTA.H.degree. was increased and the .DELTA.S.degree. was nearly the same or increased by the crosslinking. These results suggest that the crosslinking of the collagenous peptides with the Lys-Lys-dimer template(s) for **stabilization** contributes to the enthalpic effect, rather than the entropic effect.

IT 209399-88-2P 209399-90-6P

RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
 (prepn. and stabilization of constrained collagen peptide
 derivs.)

L15 ANSWER 10 OF 21 HCAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER:

1997:752959 HCAPLUS

DOCUMENT NUMBER:

128:35026

TITLE:

Preparation of large synthetic compounds based on electron donor and electron acceptor interactions

Iverson, Brent L.; Lokey, R. Scott

INVENTOR(S):
PATENT ASSIGNEE(S):

University of Texas System, USA; Iverson, Brent L.;

Lokey, R. Scott

SOURCE:

PCT Int. Appl., 115 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.				KIND DATE			APPLICATION NO.					DATE					
WO	WO 9743289			A1 19971120			WO 1997-US8478					3	19970516				
	W:	AL,	AM,	AT,	ΑU,	ΑZ,	ΒA,	BB,	BG,	BR,	BY,	CA,	CH,	CN,	CU,	CZ,	DE,
		DK,	ΕE,	ES,	FI,	GB,	GE,	GH,	HU,	IL,	IS,	JP,	KE,	KG,	ΚP,	KR,	ΚZ,
		LC,	LK,	LR,	LS,	LT,	LU,	LV,	MD,	MG,	MK,	MN,	MW,	MX,	NO,	ΝZ,	PL,
		PΤ,	RO,	RU,	SD,	SE,	SG,	SI,	SK,	ТJ,	TM,	TR,	TT,	UA,	UG,	US,	UZ,
						BY,											
	RW:	GH,	KΕ,	LS,	MW,	SD,	SZ,	UG,	ΑT,	BE,	CH,	DE,	DK,	ES,	FI,	FR,	GB,
		GR,	ΙE,	ΙΤ,	LU,	MC,	NL,	PT,	SE,	BF,	ΒJ,	CF,	CG,	CI,	CM,	GA,	GN,
		•	•		•	TD,											
AU	9732	075		A.	1	1997:	1205		Αl	U 19	97-3	2075		1997	0516		
PRIORIT	Y APP	LN.	INFO	. :				ı	US 1	996-	1713	5P	Р	1996	0517		
								I	WO 1	997-1	JS84	78	W	1997	0516		

AΒ Using predetd. electron donor-electron acceptor interactions, the present invention provides for the design, synthesis and use of compds. -[-B1-(CH2)n-Xm-Yq-Xm-(CH2)p-B2-]-[B1 = electron donor stacking unit; B2]= electron acceptor stacking unit; -(CH2)n-Xm-Yq-Xm-(CH2)p- = linking unit, X, Y = linking unit groups; n = 0-20; m = 0-20; q = 0-20; p = 0-10, with the proviso that n + m + q + p .gtoreq. 1] that are capable of interacting with, competing with and even mimicking biol. macromols. compds. may be related structurally and/or functionally to a wide variety of biologicals including proteins, nucleic acids, lipids, carbohydrates, steroids or other compds. In one embodiment, alternating electron donor-acceptor mols. (AEDAMers) are employed to create compds. having higher order structures including helixes and pleats. These compds. may be used in a myriad of different applications, which include roles as inert carriers, antigens, biol. inactive stabilizers, drugs and enzymes. Also contemplated are combinatorial processes for creating large libraries permitting rapid screening for desired structure and/or function. Thus, naphthalenetetracarboxylic acid diimide-contg. electron acceptors. I (n = 0-3) were prepd. by a combination of soln.-phase and solid-phase methods. Kinetics of assocn. and dissocn. of I with poly(dAdT), poly(dGdC), and calf thymus DNA are given.

IT 194991-80-5P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of large synthetic compds. based on electron donor and electron acceptor interactions)

L15 ANSWER 11 OF 21 HCAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1997:468995 HCAPLUS

DOCUMENT NUMBER: 127:162103

TITLE: Alanyl-PNA oligomers: a new system for intercalation

AUTHOR(S): Diederichsen, Ulf

CORPORATE SOURCE: Institut fur Organische Chemie und Biochemie, TU

Munchen, Garching, D-85747, Germany

SOURCE: Bioorganic & Medicinal Chemistry Letters (1997),

7(13), 1743-1746

CODEN: BMCLE8; ISSN: 0960-894X

PUBLISHER: DOCUMENT TYPE:

Elsevier Journal English

LANGUAGE: English

AB An alanyl peptide nucleic acid double strand is described as an environment for examg. intercalation. Addn. of 9-aminoacridine and ethidium bromide **stabilizes** an alanyl-PNA duplex contg. an abasic site.

IT 193614-48-1P 193614-49-2P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(intercalation in alanyl peptide nucleic acid oligomers contg. an abasic site)

L15 ANSWER 12 OF 21 HCAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER:

1997:321827 HCAPLUS

DOCUMENT NUMBER:

127:30509

TITLE:

Role of the Gln/Glu residues of trichocellins

A-II/B-II in ion-channel formation in lipid membranes and catecholamine secretion from chromaffin cells

AUTHOR(S):

Wada, Shun-ichi; Iida, Akira; Asami, Koji; Tachikawa,

Eiichi; Fujita, Tetsuro

CORPORATE SOURCE:

Faculty of Pharmaceutical Sciences, Kyoto University,

Sakyo, Kyoto, 606-01, Japan

SOURCE:

Biochimica et Biophysica Acta (1997), 1325(2), 209-214

CODEN: BBACAQ; ISSN: 0006-3002

PUBLISHER:
DOCUMENT TYPE:
LANGUAGE:

Elsevier Journal English

Trichocellins (TC) A-II and B-II, 20-residue peptaibols isolated from conidia of the fungus Trichoderma viride, have the same sequence except for the residue at position 18. Both TCs were found to form voltage-dependent ion-channels in bilayer lipid membranes (BLM) and to induce catecholamine secretion from bovine adrenal chromaffin cells through Ca2+ influx. TC-A-II (Gln18, neutral) was more effective than TC-B-II (Glu18, charged) for macroscopic current induction in BLMs and for catecholamine secretion from chromaffin cells, suggesting that Glu18 is unfavorable for the ion-channel formation in BLMs and chromaffin cell membranes. Nevertheless, single-channel recordings indicated that TC-B-II forms larger pores with longer open lifetimes than those of TC-A-II. This indicates that the neg. charged carboxyl group of Glu at position 18 stabilizes larger pores. The effects of the neg. charge of Glu18 on the activities were confirmed by the use of a TC-B-II analog contg. the Me ester of Glu18.

IT 156791-83-2, Trichocellin A-II 156791-85-4, Trichocellin B-II

RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study); PROC (Process)

(role of Gln/Glu residues of trichocellins A-II/B-II in ion-channel formation in lipid membranes and catecholamine secretion from chromaffin cells)

L15 ANSWER 13 OF 21 HCAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER:

1997:253932 HCAPLUS

DOCUMENT NUMBER:

126:277761

TITLE:

Peptides Constrained to Type VI .beta.-Turns. 2.

Department of Chemistry, University of Houston,

Antiparallel .beta.-Ladder Formation

AUTHOR(S): CORPORATE SOURCE: Kim, Kyonghee; Germanas, Juris P.

Houston, TX, 77204-5641, USA

Journal of Organic Chemistry (1997), 62(9), 2853-2860

CODEN: JOCEAH; ISSN: 0022-3263

American Chemical Society

DOCUMENT TYPE: Journal

LANGUAGE: English

Ι

GT

SOURCE:

PUBLISHER:

AΒ The prepn. and characterization of an extensive series of bis-amino acid conjugates of a novel .beta.-turn mimic are described. The conjugates were prepd. by coupling amino acid residues to the amino and carboxyl groups of the mimic, which represented the central two residues of a peptide constrained to the type VI turn conformation. The resultant adducts had the capability to form either singly or doubly hydrogen-bonded conformations, which represented .beta.-turn or antiparallel .beta.-ladder structures, resp. In the majority of the bis-amino acid conjugates of the cis-lactam I (or its enantiomer), only the interior hydrogen bond, characteristic of the singly hydrogen-bonded conformation, was present, according to NMR and IR spectra. When the lactam I or its enantiomer were coupled to L-Phe at its carboxyl group and Ac-Gly at its amino group, the spectral properties indicated the presence of the doubly hydrogen-bonded form. The results are consistent with other workers' studies that demonstrated that aryl residues following Pro stabilize antiparallel type VI turn structures and that the propensity of an amino acid to adopt a .beta.-conformation in proteins is highly dependent on context.

TΥ 189014-21-9P 189014-23-1P 189014-27-5P 189014-28-6P 189014-30-0P 189014-34-4P 189014-35-5P 189015-02-9P

> RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation) (antiparallel ladder formation in peptides constrained to type VI .beta.-turns)

L15 ANSWER 14 OF 21 HCAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1996:527630 HCAPLUS

DOCUMENT NUMBER: 125:162776

TITLE: Stabilization of peptides and proteins in

immunological tests by addition of small heat-shock

proteins

INVENTOR(S): Hergersberg, Christoph; Ambrosius, Dorothee; Nichtl,

Alfons; Wienhues-Thelen, Ursula-Henrike

PATENT ASSIGNEE(S): Boehringer Mannheim Gmbh, Germany

SOURCE: Ger. Offen., 13 pp.

CODEN: GWXXBX

DOCUMENT TYPE: Patent LANGUAGE: German

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

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KIND DATE
                                         APPLICATION NO. DATE
     PATENT NO.
                                           _____
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    DE 19502386 A1 19960801
WO 9623224 A1 19960801
                                           DE 1995-19502386 19950126
                                           WO 1996-EP305 19960125
        W: JP, US
         RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE
                     A1 19981021 EP 1996-900976 19960125
     EP 871882
         R: DE, ES, FR, IT
                                         JP 1996-522632 19960125
     JP 10512676 T2 19981202
                                        DE 1995-19502386 19950126
PRIORITY APPLN. INFO.:
                                        WO 1996-EP305
                                                             19960125
     In immunol. methods for the detn. of an analyte (antigen or antibody) in
AB
     ag. soln., good test linearity and a good signal/noise ratio can be
     obtained by stabilizing immunol. reactive peptides or proteins
    by addn. of a stabilizer that is chosen from .gtoreq.1 proteins
     of the family of small heat-shock proteins. This stabilization
    method is suitable for improving the storage stability of aq. solns. that
     contain peptides and is useful in conventional immunol. test systems.
    180421-36-7
    RL: ANT (Analyte); PEP (Physical, engineering or chemical process); ANST
     (Analytical study); PROC (Process)
        (peptides and proteins stabilization in immunoassays with
        small heat-shock proteins)
L15 ANSWER 15 OF 21 HCAPLUS COPYRIGHT 2002 ACS
                         1995:789399 HCAPLUS
ACCESSION NUMBER:
DOCUMENT NUMBER:
                         123:192574
                         Metal-ion chelates with acidic saccharides and
TITLE:
                         glycosaminoglycans, and methods of enhancing MRI
                         imaging
                         Ranney, David F.
INVENTOR(S):
                         Access Pharmaceuticals, Inc., USA
PATENT ASSIGNEE(S):
SOURCE:
                         PCT Int. Appl., 185 pp.
                         CODEN: PIXXD2
DOCUMENT TYPE:
                         Patent
LANGUAGE:
                         English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:
                KIND DATE
     PATENT NO.
                                           APPLICATION NO. DATE
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                            -----
                                           _____
                                                            _____
    WO 9514491 A2 19950706
A3 19950706
BBR,
                                           WO 1994-US13741 19941129
        W: AM, AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, ES, FI, GB, GE, HU, JP, KE, KG, KP, KR, KZ, LK, LT, LU, LV, MD, MG, MN, MW, NL, NO, NZ, PL, PT, RO, RU, SD, SE, SI, SK, TJ, TT, UA, US, UZ, VN RW: KE, MW, SD, SZ, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU,
             MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN,
             TD, TG
                      AA
    CA 2177468
                            19950601
                                           CA 1994-2177468 19941129
    CA 2177470
                      AA
                            19950601
                                           CA 1994-2177470 19941129
                            19950613
    AU 9512629
                      A1
                                           AU 1995-12629
                                                             19941129
                      В2
                            19980903
    AU 696166
                    A1
B1
    EP 726781
                                           EP 1995-904770 19941129
                            19960821
                          20010822
    EP 726781
        R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE
                    A1 19960918 EP 1995-903644 19941129
    EP 731713
        R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE
     JP 09509400 T2 19970922 JP 1994-515276 19941129
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T2 19970930

JP 09509650

JP 1994-515277

19941129

AU 688838 B2 19980319 AU 1995-13324 19941129 AT 204482 Ε 20010915 AT 1995-904770 19941129 US 1993-160085 A1 19931129 PRIORITY APPLN. INFO.: WO 1994-US13740 W 19941129 WO 1994-US13741 W 19941129

Agents are disclosed which comprise cationic or chem. basic metal AB chelators in assocn. with hydrophilic carriers of anionic or chem. acidic saccharides, sulfatoids and glycosaminoglycans. In certain embodiments, the agents comprise metals and metal ions. Covalent and noncovalent chem. and phys. means are described for stabilizing the binding of the metal chelators to the carriers. Noncovalently bound compns. are described which give uniquely high payloads and ratio of metal chelator to carrier, ranging from a low of about 15% metal chelator by wt. to a characteristic range of 70-90% metal chelator by wt. Specific embodiments are described comprising deferoxamine, ferrioxamine, iron-basic porphine, iron-triethylenetetraamine, gadolinium DTPA-lysine, gadolinium DOTA-lysine and gadolinium with basic derivs. of porphyrins, porphines, expanded porphyrins, texaphyrins, and sapphyrins as the basic or cationic metal chelators, which are in turn, bound to acidic or anionic carriers, including one or more of acidic or anionic saccharides, and including sulfated sucrose, pentosan polysulfate, dermatan sulfate, essentially purified dermatan sulfate, essentially purified dermatan sulfate with a sulfur content of up to 9% and with selective oligosaccharide oversulfation, chondroitin sulfate, oversulfated chondroitin sulfate, heparan sulfate, beef heparin, porcine heparin, nonanticoagulant heparins, and other native and modified acidic saccharides and glycosaminoglycans. Also disclosed are methods of enhancing in vivo images arising from induced magnetic resonance signals, and methods of enhancing in vivo images in conjunction with ultrasound or X-rays. Prepn. of agents of the invention is described. A Gd(III) chelate with an N-methyl-1,3propanediamine deriv. of DTPA was prepd., as was a paired-ion formulation contg. the chelate and dermatan sulfate (Gd:MPD-DTPA:DS). The Gd:MPD-DTPA:DS was tested as a selected contrast agent in the MRI imaging of lactating breast carcinoma and of prostate adenocarcinomas in rats. IT

18972-10-6D, Ferrichrysin, conjugates with acidic saccharides and glycosaminoglycans

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (metal-ion chelates with acidic saccharides and glycosaminoglycans, agent prepn., and methods of enhancing MRI imaging)

L15 ANSWER 16 OF 21 HCAPLUS COPYRIGHT 2002 ACS 1995:713669 HCAPLUS ACCESSION NUMBER:

DOCUMENT NUMBER: 123:144634

TITLE: Preparation of peptide analogs and other oxazolone

(azlactone) derived materials.

Hogan, Joseph C., Jr. INVENTOR(S):

Legomer Partners, L.P., USA PATENT ASSIGNEE(S): PCT Int. Appl., 134 pp. SOURCE:

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. --------------\_\_\_\_\_ WO 1993-US6240 19930630 A1 19940106 WO 9400509

W: AT, AU, BB, BG, BR, BY, CA, CH, CZ, DE, DK, ES, FI, GB, HU, JP, KP, KR, KZ, LK, LU, MG, MN, MW, NL, NO, NZ, PL, PT, RO, RU, SD, SE, SK, UA, US

RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG AU 9346591 AU 1993-46591 A1 19940124 19930630 AU 678168 **B2** 19970522 EP 649443 EP 1993-916883 Α1 19950426 19930630 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE T2 JP 08500576 19960123 JP 1993-502661 19930630 BR 9306656 19981208 BR 1993-6656 19930630 PRIORITY APPLN. INFO.: US 1992-906756 19920630 US 1993-41562 19930402 WO 1993-US6240 19930630

GI

AX (NHCRR1COG) nYB [A, B = bond, H, electrophilic group, nucleophilic group, amino acid deriv., nucleotide deriv., carbohydrate deriv., org. structural motif, reporter element, org. moiety contg. a polymerizable group, macromol. component, etc.; A and B are optionally connected to each other or to other structures; X, Y = bond, .gtoreq.1 C, N, S, O atom or combinations thereof; R, R1 = (substituted) alkyl, cycloalkyl, aralkyl, alkaryl, or heterocyclic derivs. thereof; G = connecting group, bond; n .gtoreq.1; with provisos], were prepd. The new mols. and fabricated materials are mol. recognition agents useful in the design and synthesis of drugs, and have applications in sepns. and materials science. Thus, human elastase inhibitor (I) was prepd. starting from (S)-2-methylleucine via azlactone intermediates (II) and (III).

III

IT 165660-72-0P

ΙT

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation) (coating material; prepn. of oxazolone (azlactone) derived materials)

165660-74-2DP, silica-bound, protein A-functionalized

RL: BUU (Biological use, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of oxazolone (azlactone) derived materials)

IT 165660-73-1DP, silica-bound

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation) (prepn. of oxazolone (azlactone) derived materials)

L15 ANSWER 17 OF 21 HCAPLUS COPYRIGHT 2002 ACS

1994:502382 ACCESSION NUMBER: HCAPLUS

DOCUMENT NUMBER: 121:102382

Monolayer Properties of Hydrophobic .alpha.-Helical TITLE:

Peptides Having Various End Groups at the Air/Water

AUTHOR(S): Fujita, Katsuhiko; Kimura, Shunsaku; Imanishi, Yukio;

Rump, Elmar; Ringsdorf, Helmut

CORPORATE SOURCE: Faculty of Engineering, Kyoto University, Kyoto,

606-01, Japan

Langmuir (1994), 10(8), 2731-5 SOURCE:

CODEN: LANGD5; ISSN: 0743-7463

DOCUMENT TYPE: Journal LANGUAGE: English

A hydrophobic peptide, Boc-(Ala-Aib)8-OMe (BA16M), and its end-modified AΒ derivs. were synthesized, and the pressure-area (.pi.-A) isotherms of the peptides spread at the air/water interface were studied from the viewpoint of interhelix interactions. All .pi.-A isotherms of the synthetic peptides showed an inflection and weak irregular bumping at a surface areas of about 240 and 230 .ANG.2/mol., resp., indicating that the helix axis of the peptide is oriented parallel to the interface. A small mound was obsd. at around 300 .ANG.2/mol. in the .pi.-a isotherm of BA16M, which was ascribed to the phase transition from a liq. to a solid state. The monolayer of an equimolar mixt. of the peptides having an opposite kind of charge in the end group underwent the phase transition in the .pi.-A isotherm, which was not obsd. with one of the two peptides. The electrostatic interaction between the end groups should stabilize the mol. packing at the interface.

156704-79-9 IT

RL: PRP (Properties)

(monolayer properties of, at air/water interface)

L15 ANSWER 18 OF 21 HCAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1993:423018 HCAPLUS

DOCUMENT NUMBER: 119:23018

TITLE: Sequence and solution conformation of the 20-residue

peptaibols, saturnisporins SA II and SA IV

Rebuffat, Sylvie; Conraux, Laurence; Massias, Marcel; AUTHOR(S):

Auvin-Guette, Catherine; Bodo, Bernard

Lab. Chem., Natl. Mus. Nat. Hist., Paris, Fr. CORPORATE SOURCE: SOURCE:

Int. J. Pept. Protein Res. (1993), 41(1), 74-84

CODEN: IJPPC3; ISSN: 0367-8377

DOCUMENT TYPE: Journal LANGUAGE: English

Saturnisporins SA II and SA IV are the major components of the 20-residue peptaibol mixt. isolated from a culture of the fungus Trichoderma saturnisporum. These peptides exhibit antibiotic activity against Staphylococcus aureus. Their sequences were derived from unequivocal methodol. implying the combined use of pos. ion FAB mass spectrometry and NMR: the majority of the sequences result from mass spectrometry fragmentations and the location of isomeric residues arises either from anal. of ROESY cross-peaks between contiguous amide protons or from heteronuclear 2J or 3J 1H-13C couplings detected in long-range 1H-13C COSY expts. The sequence specific 1H and 13C NMR assignments are described. Saturnisporins SA II and SA IV exhibit similar secondary structures, as deduced from their ROESY patterns and 3JNHC.alpha.H coupling const. values, together with amide hydrogen-deuterium exchange rates and temp. coeffs. of amide and carbonyl groups. An overall .alpha.-helical structure is proposed, maintaining two regions of distortion to this regular structure; (i) the N-terminal part, which contains 310 and mixed

.alpha.-310 turns, and (ii) the Aib10-Val15 region, including a Pro residue which accommodates a bend stabilized by two 310 H-bonds.

86090-95-1 148159-85-7 IT

RL: PRP (Properties)

(amino acid sequence and soln. conformation of)

L15 ANSWER 19 OF 21 HCAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER:

1990:139808 HCAPLUS

DOCUMENT NUMBER:

112:139808

TITLE:

Retention behavior of paracelsin peptides on

reversed-phase silicas with varying n-alkyl chain

length and ligand density

AUTHOR(S):

Lork, K. D.; Unger, K. K.; Brueckner, H.; Hearn, M. T.

CORPORATE SOURCE:

Inst. Anorg. Chem. Anal. Chem., Johannes

Gutenberg-Univ., Mainz, D-6500, Fed. Rep. Ger.

SOURCE:

J. Chromatogr. (1989), Volume Date 1988, 476, 135-45 CODEN: JOCRAM; ISSN: 0021-9673

DOCUMENT TYPE:

Journal

LANGUAGE: English

As part of further investigations on the characterization of the ligand-induced conformational stabilization of peptides, two series of n-alkyldimethylsilyl-bonded silicas have been prepd. In series A, the n-alkyl chain length, n, of the bonded phase was varied between 1 and 20 carbon atoms at a const. ligand d. In series B, the ligand d., .alpha.exp, was gradually changed from 0 to 4.1 .mu.mol/m2 on a C1, C4, C6, C8, and C18 bonded phase. The retention behavior of four peptides of the paracelsin family were examd. under isocratic conditions, using a ternary mobile phase of water-methanol-acetonitrile (22:39:39, vol./vol./v). Plots of k' vs. n showed pronounced max. between n = 2 and 4 carbon atoms, followed by a decrease by a factor of 3 at n = 5, whereas above 5 carbon atoms only a slight increase in k' was obsd. The selectivity behavior of the paracelsins A-D can be mainly rationalized by interaction of the amphiphathic polypeptide 3.613(.alpha.)-helix with the hydrophobic ligand and protrusion of the key amino acid residues at positions 6 and 9 in the sequence. However, from expts. with a polystyrene stationary phase it is evident that hydrophobic interactions and different partition coeffs. also contribute to the resoln. of the paracelsin peptides. Furthermore, Van't Hoff plots confirm significant free energy changes assocd. with retention. These observations provide the basis for evaluating the enthalpic and entropic changes assocd. with peptide interactions with n-alkyl silicas.

86090-94-0, Paracelsin A 86090-95-1, Paracelsin B 86090-96-2, Paracelsin C 95298-59-2, Paracelsin D

RL: RCT (Reactant)

(retention behavior of, on reversed-phase silicas with varying alkyl chain length and ligand d.)

L15 ANSWER 20 OF 21 HCAPLUS COPYRIGHT 2002 ACS

1976:136044 HCAPLUS ACCESSION NUMBER:

DOCUMENT NUMBER:

84:136044

TITLE:

Study of intramolecular constraints which involve .pi. electrons of amide functions. Effect of the type of

interaction on the conformation of peptides and

proteins

AUTHOR(S): CORPORATE SOURCE: Marraud, Michel; Neel, Jean; Maigret, Bernard Lab. Chim.-Phys. Macromol., Ec. Natl. Super. Ind.

Chim., Nancy, Fr.

SOURCE:

J. Chim. Phys. Phys.-Chim. Biol. (1975), 72(10),

1173-84

CODEN: JCPBAN

DOCUMENT TYPE: Journal LANGUAGE: French

GΙ

O H CONHMe I

Infrared spectroscopy has been used to investigate the conformational AB states taken in diluted CCl4 solns. by several model compds., R1CONR2CR3R4CONHR5, contg. an .alpha.-imino-acid residue. Beside the common C7 structure, a second conformer has been identified, which is stabilized by a N-H---.pi. intramol. interaction between the N-H proton donor site and the .pi. electrons of the tertiary amide linkage. theor. anal. carried out by the PCILO method has shown, in close agreement with the exptl. results, that I can assume two conformations, i.e., the Rexo (.PHI..apprxeq.107.degree., .PSI..apprxeq.-30.degree., .CHI.1.apprxeq.20.degree.) and the Eendo (.PHI..apprxeq.133.degree., .PSI..apprxeq.150.degree., .CHI.1.apprxeq.-20.degree.) forms. The former has been evidenced in soln. by infrared spectroscopy and the latter, in the solid state, by x-ray diffraction. In a L peptide sequence, the N-H---.pi. interaction results in a preferential PL state (.PHI..apprxeq.-90.degree., .PSI..apprxeq.0.degree.) close to the conformation of the C-terminal residue in a .beta.-bend and can cooperate with the N-H---O H bond to stabilize such a folding. A large no. of amino-acid residues seem to be in the PL state in crystalline native proteins. Thus, N-H---.pi. interactions might contribute to the stabilization of the secondary and tertiary structures of these macromols.

IT 15258-80-7

RL: PRP (Properties)

(conformation of, ir spectra in relation to)

L15 ANSWER 21 OF 21 HCAPLUS COPYRIGHT 2002 ACS ACCESSION NUMBER: 1976:122321 HCAPLUS

DOCUMENT NUMBER: 84:122321

TITLE: On the conformation of cyclic iron-containing

hexapeptides: the crystal and molecular structure of

ferrichrysin

AUTHOR(S): Norrestam, R.; Stensland, B.; Branden, C. I. CORPORATE SOURCE: Arrhenius Lab., Univ. Stockholm, Stockholm, Swed.

SOURCE: J. Mol. Biol. (1975), 99(3), 501-6

CODEN: JMOBAK

DOCUMENT TYPE: Journal LANGUAGE: English

GI For diagram(s), see printed CA Issue.

AB The mol. structure of ferrichrysin (I) was elucidated from x-ray diffraction data. The mol. conformation shows similarities with ferrichrome A. The iron(III) ions are co-ordinated by three hydroxamate groups in an octahedral cis-.LAMBDA. arrangement. All three ornithyl side chains are stabilized by intra-mol. H bonds. All ferrichromes that exhibit iron transport activities contain glycine in the same relative position in the peptide chain, which suggests that the type II .beta.-loop obsd. in both ferrichrysin and ferrichrome A is a biologically significant feature of the ferrichrome class of compds.

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18972-10-6
IT
     RL: PRP (Properties)
        (crystal and mol. structure of, hydrogen bonds in)
=> sel hit rn
E1 THROUGH E9 ASSIGNED
=> file reg
FILE 'REGISTRY' ENTERED AT 16:05:52 ON 16 AUG 2002
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STRUCTURE FILE UPDATES:
                          15 AUG 2002 HIGHEST RN 444046-42-8
DICTIONARY FILE UPDATES: 15 AUG 2002 HIGHEST RN 444046-42-8
TSCA INFORMATION NOW CURRENT THROUGH MAY 20, 2002
  Please note that search-term pricing does apply when
  conducting SmartSELECT searches.
Crossover limits have been increased. See HELP CROSSOVER for details.
Calculated physical property data is now available. See HELP PROPERTIES
for more information. See STNote 27, Searching Properties in the CAS
Registry File, for complete details:
http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf
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L17 ANSWER 1 OF 9 REGISTRY COPYRIGHT 2002 ACS
RN
     326037-61-0 REGISTRY
     Decarboxylase, oxoglutarate (Escherichia coli 0157:H7 strain EDL933 gene
CN
     menD) (9CI)
                 (CA INDEX NAME)
OTHER NAMES:
     Decarboxylase, oxoglutarate; SHCHC synthase (Escherichia coli O157:H7
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strain EDL933 gene menD)
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SR
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REFERENCE
    ANSWER 2 OF 9 REGISTRY COPYRIGHT 2002 ACS
     326036-95-7 REGISTRY
     Tail component of prophage CP-933V (Escherichia coli O157:H7 strain EDL933
     gene Z3318) (9CI) (CA INDEX NAME)
OTHER NAMES:
CN
     GenBank AE005441-derived protein GI 12516370
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REFERENCE
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L17 ANSWER 3 OF 9 REGISTRY COPYRIGHT 2002 ACS
     326035-31-8 REGISTRY
RN
CN
     Collagenase (Escherichia coli O157:H7 strain EDL933 gene ydcP) (9CI)
                                                                           (CA
     INDEX NAME)
OTHER NAMES:
     GenBank AE005362-derived protein GI 12515267
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REFERENCE
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L17 ANSWER 4 OF 9 REGISTRY COPYRIGHT 2002 ACS
     326034-70-2 REGISTRY
RN
     Potassium channel protein (Escherichia coli O157:H7 strain EDL933 gene
     kch) (9CI) (CA INDEX NAME)
OTHER NAMES:
CN
     GenBank AE005342-derived protein GI 12514972
FS
     PROTEIN SEQUENCE
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REFERENCE
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     ANSWER 5 OF 9 REGISTRY COPYRIGHT 2002 ACS
     326034-41-7 REGISTRY
RN
     Head-DNA stabilization protein of prophage CP-933X (Escherichia coli
     O157:H7 strain EDL933 gene Z1887) (9CI) (CA INDEX NAME)
OTHER NAMES:
     GenBank AE005330-derived protein GI 12514815
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REFERENCE
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L17 ANSWER 6 OF 9 REGISTRY COPYRIGHT 2002 ACS
     325530-04-9 REGISTRY
RN
CN
     Glucosyltransferase, uridine diphosphoglucose-collagen (Escherichia coli
     strain O157:H7 gene ECs4502) (9CI) (CA INDEX NAME)
OTHER NAMES:
     GenBank AE005590-derived protein GI 12518380
CN
     GenBank AP002566-derived protein GI 13363977
CN
     LPS biosynthesis enzyme (Escherichia coli O157:H7 strain EDL933 gene waaJ)
CN
     UDP-glucose: (galactosyl) LPS .alpha.1,2-glucosyltransferase (Escherichia
CN
     coli strain O157:H7 gene ECs4502)
     PROTEIN SEQUENCE
FS
MF
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CI
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SR
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LC
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REFERENCE
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REFERENCE
            2: 134:217892
L17 ANSWER 7 OF 9 REGISTRY COPYRIGHT 2002 ACS
RN
     325527-35-3 REGISTRY
     Collagenase (Escherichia coli strain O157:H7 gene ECs4039) (9CI) (CA
CN
     INDEX NAME)
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OTHER NAMES:
    Collagenase (Escherichia coli O157:H7 strain EDL933 gene yhbU)
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CN
     GenBank AP002564-derived protein GI 13363512
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REFERENCE
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            2: 134:217892
REFERENCE
    ANSWER 8 OF 9 REGISTRY COPYRIGHT 2002 ACS
T.17
RN
    209399-90-6 REGISTRY
CN
    L-Lysinamide, L-cysteinylglycylglycyl-L-prolyl-(4R)-4-hydroxy-L-
     prolylglycyl-L-prolyl-(4R)-4-hydroxy-L-prolylglycyl-L-prolyl-(4R)-4-
     hydroxy-L-prolylglycyl-L-prolyl-(4R)-4-hydroxy-L-prolylglycyl-L-prolyl-
     (4R)-4-hydroxy-L-prolyl-N6-(oxoacetyl)-, (18.fwdarw.1'''), (18'.fwdarw.1'''
     '), (18''.fwdarw.1'''')-trialdoxime with N2, N6-bis[N-[(aminooxy)acetyl]-
     .beta.-alanyl]-L-lysyl-N6-[N-[(aminooxy)acetyl]-.beta.-alanyl]-L-
     lysylglycyl-L-tyrosinamide, (1.fwdarw.l''''), (1'.fwdarw.l'''''), (1''.f
     wdarw.1''''''--tris(thioether) with N2,N6-bis[N-(mercaptoacetyl)-.beta.-
     alanyl-.beta.-alanyl]-L-lysyl-N6-[N-(mercaptoacetyl)-.beta.-alanyl-.beta.-
     alanyl]-L-lysylglycyl-L-tyrosinamide (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
    L-Lysinamide, L-cysteinylglycylglycyl-L-prolyl-(4R)-4-hydroxy-L-
CN
    prolylglycyl-L-prolyl-(4R)-4-hydroxy-L-prolylglycyl-L-prolyl-(4R)-4-
     hydroxy-L-prolylglycyl-L-prolyl-(4R)-4-hydroxy-L-prolylglycyl-L-prolyl-
     (4R)-4-hydroxy-L-prolyl-N6-(oxoacetyl)-, (18.fwdarw.1'''), (18'.fwdarw.1'''
     '), (18''.fwdarw.1'''')-trialdoxime with N2, N6-bis[N-[(aminooxy)acetyl]-
     .beta.-alanyl]-L-lysyl-N6-[N-[(aminooxy)acetyl]-.beta.-alanyl]-L-
     lysylglycyl-L-tyrosinamide, (1.fwdarw.1''''), (1'.fwdarw.1'''''), (1''.f
     wdarw.1''''''--tris(sulfide) with N2, N6-bis[N-(mercaptoacetyl)-.beta.-
     alanyl-.beta.-alanyl]-L-lysyl-N6-[N-(mercaptoacetyl)-.beta.-alanyl-.beta.-
     alanyl]-L-lysylglycyl-L-tyrosinamide
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LC
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REFERENCE
           1: 129:95711
    ANSWER 9 OF 9 REGISTRY COPYRIGHT 2002 ACS
T.17
RN
    209399-88-2 REGISTRY
    L-Lysinamide, L-cysteinylglycylglycyl-L-prolyl-(4R)-4-hydroxy-L-
CN
    prolylqlycyl-L-prolyl-(4R)-4-hydroxy-L-prolylglycyl-L-prolyl-(4R)-4-
    hydroxy-L-prolyl-N6-(oxoacetyl)-, (12.fwdarw.1'''), (12'.fwdarw.1''''), (12'
```

```
'.fwdarw.1'''')-trialdoxime with N2,N6-bis[N-[(aminooxy)acetyl]-.beta.-
     alanyl]-L-lysyl-N6-[N-[(aminooxy)acetyl]-.beta.-alanyl]-L-lysylglycyl-L-
     tyrosinamide, (1.fwdarw.1''''), (1'.fwdarw.1'''''), (1''.fwdarw.1'''''
     ')-tris(thioether) with N2,N6-bis[N-(mercaptoacetyl)-.beta.-alanyl-.beta.-
     alanyl]-L-lysyl-N6-[N-(mercaptoacetyl)-.beta.-alanyl-.beta.-alanyl]-L-
     lysylglycyl-L-tyrosinamide (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
    L-Lysinamide, L-cysteinylglycylglycyl-L-prolyl-(4R)-4-hydroxy-L-
     prolylglycyl-L-prolyl-(4R)-4-hydroxy-L-prolylglycyl-L-prolyl-(4R)-4-
     hydroxy-L-prolyl-N6-(oxoacetyl)-, (12.fwdarw.1'''),(12'.fwdarw.1''''),(12'
     '.fwdarw.1'''')-trialdoxime with N2,N6-bis[N-[(aminooxy)acetyl]-.beta.-
     alanyl]-L-lysyl-N6-[N-[(aminooxy)acetyl]-.beta.-alanyl]-L-lysylglycyl-L-
     tyrosinamide, (1.fwdarw.1'''''), (1'.fwdarw.1'''''), (1''.fwdarw.1''''''
     ')-tris(sulfide) with N2, N6-bis[N-(mercaptoacetyl)-.beta.-alanyl-.beta.-
     alanyl]-L-lysyl-N6-[N-(mercaptoacetyl)-.beta.-alanyl-.beta.-alanyl]-L-
     lysylglycyl-L-tyrosinamide
     PROTEIN SEQUENCE
FS
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MF
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LC
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REFERENCE 1: 129:95711